SEQUENCE LISTING

GEN-100D1

<110> Bougueleret, Lydie

Chumakov, Ilya

<120> Human Defensin Polypeptide Def-X, Genomic DNA and cDNA, Composition Containing Them and Applications to Diagnosis and to Therapeutic Treatment

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<140> US 10/045,180

<141> 2001-10-18

<150> US 09/486,580

<151> 2000-02-25

<150> PCT/FR98/01864

<151> 1998-08-28

<150> FR 97/10823

<151> 1997-08-29

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<170> PatentIn version 3.1

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Thr Leu Thr Leu Leu Ser Ala Phe Leu Leu Val Ala Leu Gln Ala Trp
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Ala Glu Pro Leu Gln Ala Arg Ala His Glu Met Pro Ala Gln Lys Gln
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cct cca gca gat gac cag gat gtg gtc att tac ttt tca gga gat gac    201
Pro Pro Ala Asp Asp Gln Asp Val Val Ile Tyr Phe Ser Gly Asp Asp
35                  40                  45                  50

agc tgc tct ctt cag gtt cca ggc tca aca aag ggc ttg atc tgc cat    249
Ser Cys Ser Leu Gln Val Pro Gly Ser Thr Lys Gly Leu Ile Cys His
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Cys Arg Val Leu Tyr Cys Ile Phe Gly Glu His Leu Gly Gly Thr Cys
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Lys Gln Pro Pro Ala Asp Asp Gln Asp Val Val Ile Tyr Phe Ser Gly
        35                  40                  45

Asp Asp Ser Cys Ser Leu Gln Val Pro Gly Ser Thr Lys Gly Leu Ile
    50                  55                  60

Cys His Cys Arg Val Leu Tyr Cys Ile Phe Gly Glu His Leu Gly Gly
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Ala Trp Ala


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&lt;211&gt;   44

&lt;212&gt;   PRT

&lt;213&gt;   Homo sapiens


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&lt;221&gt;   PROPEP

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&lt;223&gt;   Def-X propeptide


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Pro Ala Asp Asp Gln Asp Val Val Ile Tyr Phe Ser Gly Asp Asp Ser
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Cys Ser Leu Gln Val Pro Gly Ser Thr Lys Gly Leu
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ctaatgccct agaacctaaa accatcatct ggggcccagt tccccaaata gccctaattt     420

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gaatcacatc tcaatggtgg atgtcactta ggtggcttta cttaccatct ctgggcctcg   3480

attttcttat ctcgaaactg aatagagaga caaacaaatg taagtagtct tctttctcca   3540

aagacttgat tccaaggtat gtctataaaa ttcgctaggg ttaagatatg gagagacaga   3600

ttgaccagtt ctttctggat ctaaacaagt agatattata gggaaaatat ttcattctgc   3660

caacaaagga aattttaaaa actggagatg ggcttaagag tatgttcagg tgtgtgtctg   3720

atggggcaaa agcacacaaa tcagagcaaa agagaatgag tctcaaatcc tgtatgagca   3780

gcattgctct gtgtatttat tcctattgac taaggttgtt tgtgctaccg gcactaatgc   3840

agccagcatc accggtcagc cagcatgtgc attctccaag attcccttta ccacccaccg   3900

ctgaccttgg tgcttaattt ctcagtcttc ctctgtgttc ccaggctcaa caaggggcat   3960
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ggtctgctct tgcagattag tattctgccg gcgaacagaa cttcgtgttg ggaactgcct   4020

cattggtggt gtgagtttca catactgctg cacgcgtgtc gattaacatt ctgctgtcca   4080

agagaatgtc atgctgggaa cgccatcatc ggtggtgtta gcttcacatg cttctgcagc   4140

tgagcttgca gaatagagaa aaatgagctc ataatttgct ttgagagcta caggaaatgg   4200

ttgtttctcc tatactttgt ccttaacatc tttcttgatc ctaaatatat atctcgtaac   4260

aagatgtctt tgtttacacc tctttgaaat ttgat                               4295
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<211>  542

<212>  DNA

<213>  Homo sapiens


<220>

<221>  CDS

<222>  (52)..(345)

<223>  Def-4 (HNP-4) coding sequence


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gtctgccctc tctgctcgcc ctgcctagct tgaggatctg tcaccccagc c atg agg    57
                                                          Met Arg
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att atc gcc ctc ctc gct gct att ctc ttg gta gcc ctc cag gtc cgg    105
Ile Ile Ala Leu Leu Ala Ala Ile Leu Leu Val Ala Leu Gln Val Arg
          5                  10                  15

gca ggc cca ctc cag gca aga ggt gat gag gct cca ggc cag gag cag    153
Ala Gly Pro Leu Gln Ala Arg Gly Asp Glu Ala Pro Gly Gln Glu Gln
        20                  25                  30

cgt ggg cca gaa gac cag gac ata tct att tcc ttt gca tgg gat aaa    201
Arg Gly Pro Glu Asp Gln Asp Ile Ser Ile Ser Phe Ala Trp Asp Lys
35                  40                  45                  50

agc tct gct ctt cag gtt tca ggc tca aca agg ggc atg gtc tgc tct    249
Ser Ser Ala Leu Gln Val Ser Gly Ser Thr Arg Gly Met Val Cys Ser
                55                  60                  65

tgc aga tta gta ttc tgc cgg cga aca gaa ctt cgt gtt ggg aac tgc    297
Cys Arg Leu Val Phe Cys Arg Arg Thr Glu Leu Arg Val Gly Asn Cys
            70                  75                  80
```

```
ctc att ggt ggt gtg agt ttc aca tac tgc tgc acg cgt gtc gat taa    345
Leu Ile Gly Gly Val Ser Phe Thr Tyr Cys Cys Thr Arg Val Asp
        85                      90                  95

cgttctgctg tccaagagaa tgtcatgctg ggaacgccat catcggtggt gttagcttca    405

catgcttctg cagctgagct tgcagaatag agaaaaatga gctcataatt tgctttgaga    465

gctacaggaa atggttgttt ctcctatact ttgtccttaa catctttctt gatcctaaat    525

atatatctcg taacaag                                                    542
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<210> 9

<211> 97

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (1)..(97)

<223> Def-4 preproprotein sequence


<220>

<221> SIGNAL

<222> (1)..(19)

<223> Def-4 signal peptide


<220>

<221> PROPEP

<222> (20)..(63)

<223> Def-4 propeptide


<220>

<221> PEPTIDE

<222> (64)..(97)

<223>  Def-4 mature peptide


<400>  9

Met Arg Ile Ile Ala Leu Leu Ala Ala Ile Leu Leu Val Ala Leu Gln
1               5                   10                  15

Val Arg Ala Gly Pro Leu Gln Ala Arg Gly Asp Glu Ala Pro Gly Gln
            20                  25                  30

Glu Gln Arg Gly Pro Glu Asp Gln Asp Ile Ser Ile Ser Phe Ala Trp
        35                  40                  45

Asp Lys Ser Ser Ala Leu Gln Val Ser Gly Ser Thr Arg Gly Met Val
        50                  55                  60

Cys Ser Cys Arg Leu Val Phe Cys Arg Arg Thr Glu Leu Arg Val Gly
65                  70                  75                  80

Asn Cys Leu Ile Gly Gly Val Ser Phe Thr Tyr Cys Cys Thr Arg Val
                85                  90                  95

Asp


<210>  10

<211>  94

<212>  PRT

<213>  Homo sapiens


<220>

<221>  MISC_FEATURE

<222>  (1)..(94)

<223>  Def-5 preproprotein sequence


<220>

<221>  SIGNAL


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<222>   (1)..(19)

<223>   Def-5 signal peptide


<220>

<221>   PROPEP

<222>   (20)..(63)

<223>   Def-5 propeptide


<220>

<221>   PEPTIDE

<222>   (64)..(94)

<223>   Def-5 mature peptide


<400>   10

```
Met Arg Thr Ile Ala Ile Leu Ala Ala Ile Leu Leu Val Ala Leu Gln
1               5                   10                  15

Ala Gln Ala Glu Ser Leu Gln Glu Arg Ala Asp Glu Ala Thr Thr Gln
            20                  25                  30

Lys Gln Ser Gly Glu Asp Asn Gln Asp Leu Ala Ile Ser Phe Ala Gly
        35                  40                  45

Asn Gly Leu Ser Ala Leu Arg Thr Ser Gly Ser Gln Ala Arg Ala Thr
    50                  55                  60

Cys Tyr Cys Arg Thr Gly Arg Cys Ala Thr Arg Glu Ser Leu Ser Gly
65                  70                  75                  80

Val Cys Glu Ile Ser Gly Arg Leu Tyr Arg Leu Cys Cys Arg
                85                  90
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<210>   11

<211>   100

<212>   PRT


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<213> Homo sapiens


<220>

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<222> (1)..(100)

<223> Def-6 preproprotein sequence


<220>

<221> SIGNAL

<222> (1)..(19)

<223> Def-6 signal peptide


<220>

<221> PROPEP

<222> (20)..(70)

<223> Def-6 propeptide


<220>

<221> PEPTIDE

<222> (71)..(100)

<223> Def-6 mature peptide


<400> 11

Met Arg Thr Leu Thr Ile Leu Thr Ala Val Leu Leu Val Ala Leu Gln
1               5                   10                  15

Ala Lys Ala Glu Pro Leu Gln Ala Glu Asp Asp Pro Leu Gln Ala Lys
                20                  25                  30

Ala Tyr Glu Ala Asp Ala Gln Glu Gln Arg Gly Ala Asn Asp Gln Asp
        35                  40                  45

```
Phe Ala Val Ser Phe Ala Glu Asp Ala Ser Ser Ser Leu Arg Ala Leu
    50              55              60

Gly Ser Thr Arg Ala Phe Thr Cys His Cys Arg Arg Ser Cys Tyr Ser
65              70              75              80

Thr Glu Tyr Ser Tyr Gly Thr Cys Thr Val Met Gly Ile Asn His Arg
                85              90              95

Phe Cys Cys Leu
            100
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<211>  94

<212>  PRT

<213>  Homo sapiens


<220>

<221>  MISC_FEATURE

<222>  (1)..(94)

<223>  Def-1 preproprotein sequence


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<222>  (1)..(19)

<223>  Def-1 signal peptide


<220>

<221>  PROPEP

<222>  (20)..(64)

<223>  Def-1 propeptide


<220>

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&lt;221&gt;   PEPTIDE

&lt;222&gt;   (65)..(94)

&lt;223&gt;   Def-1 mature peptide


&lt;400&gt;   12

Met Arg Thr Leu Ala Ile Leu Ala Ala Ile Leu Leu Val Ala Leu Gln
1               5                   10                  15

Ala Gln Ala Glu Pro Leu Gln Ala Arg Ala Asp Glu Val Ala Ala Ala
            20                  25                  30

Pro Glu Gln Ile Ala Ala Asp Ile Pro Glu Val Val Val Ser Leu Ala
        35                  40                  45

Trp Asp Glu Ser Leu Ala Pro Lys His Pro Gly Ser Arg Lys Asn Met
    50                  55                  60

Ala Cys Tyr Cys Arg Ile Pro Ala Cys Ile Ala Gly Glu Arg Arg Tyr
65                  70                  75                  80

Gly Thr Cys Ile Tyr Gln Gly Arg Leu Trp Ala Phe Cys Cys
                85                  90